## **Application Instructions** Hempel's HEMUCRYL product range



For product description refer to the specific HEMUCRYL product data sheet.

Scope: The This Application Instruction covers surface preparation and application conditions of HEMPEL'S

HEMUCRYLs.

Surface preparation: **For Primers:** 

> New steel: Remove oil and grease, etc. with suitable detergent. Remove salt and other contaminants by (high pressure) fresh water cleaning. Abrasive blasting to minimum Sa 2½. For temporary protection, if required, use suitable shopprimer. All damaged shopprimer and contamination from storage and fabrication should be thoroughly cleaned prior to final painting. For repair and touch-up use the specified HEMUCRYL primer type.

Repair: Remove oil and grease, etc. with suitable detergent. Remove salt and other contaminants by (high pressure) fresh water cleaning. Remove rust and loose paint by abrasive blasting or power tool cleaning to St 3 before recoating. Touch up bare spots with the specified HEMUCRYL primer type.

Aluminium: Very thorough degreasing, followed by (high pressure) fresh water cleaning to remove all salts and other contamination. Any anodizing must be completely removed. Thorough sand papering or abrasive sweeping with mineral abrasives is recommended. Cast aluminium is recommended to be abrasive swept to a uniform, evenly grey appearance.

Stainless steel: Very thorough degreasing with alkaline degreaser, i.e. HEMPEL'S LIGHT CLEANER 99350, followed by fresh water hosing to remove all contamination.

Hot-dipped galvanized steel: Wet rubbing/grinding with ammonia water 1:20 followed by fresh water hosing. In the case this method is not feasible the procedure as described for stainless steel may be used.

Zinc silicate coated surfaces: Remove oil and grease, etc, with suitable detergent. Remove salt and other contaminants by high pressure fresh water cleaning. After exposure to high humidity, zinc salts ("white rust") must be removed carefully by (high pressure) fresh water cleaning - if necessary combined with scrubbing with stiff nylon brushes. Consult the APPLICATION INSTRUCTIONS for the relevant GALVOSIL product.

Among the HEMUCRYL primer types, HEMUCRYL TI-COAT 18200 is designed to be used as the first coat on aluminium, hot-dipped galvanized steel, stainless steel and on zinc silicate coated surfaces.

## For Topcoats:

Preceding coats should be sound and tightly adhering. Remove oil and grease with suitable detergent. Remove salts and other contaminants by (high pressure) fresh water cleaning. Remove rust and loose material by abrasive blasting or power tool cleaning. Dust off residues. Touch up to full system before recoating with specified HEMUCRYL topcoat type.

Concrete: Any oil, grease and other contaminants should be removed by eg volatilizing by flame cleaning or treatment with suitable detergent, the latter in the following way:

- Saturation of the surface with fresh water 1)
- 2) Washing with suitable detergent followed by fresh water hosing

Remove loose material eg by stiff brushes or blasting, high pressure jetting or flame cleaning followed by fresh water hosing depending on circumstances. Three last mentioned methods are also able to remove scum layer if necessary. After surface preparation the surface should feel solid and hard. Remove dust. Saturate surface with suitable sealer, e.g. micro dispersed acrylic type or by the HEMUCRYL topcoat diluted 15- 20% with water.

Good painting practice: The durability/performance of water-borne coatings is to a very high degree depending on the fulfilment of good painting practice. For instance application to riveted and skip-welded constructions will require extra care when coating sharp edges, riveted joints, etc. Avoid too high thicknesses per coat. Preferably apply an extra stripe coat.

"Edge effect":

Furthermore, as water-borne paints have a high tendency to "withdraw" from sharp edges, etc., proper corrosion protection will be highly supported by careful rounding of edges and that any joints are completely closed and tight.

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Exposure to low temperatures shortly after application:

If the painted items will be exposed to humidity/water at temperatures below 5-10°C/41-50°F shortly after finishing the paint application, it is of utmost importance for later good performance that following rules are complied with:

- Excessive film thickness must be avoided.
- The (last applied) paint layer must dry for at least 6 hours at 20°C/68°F 40-60% RH, 12 hours at 10°C/50°F - 40-60% RH before exposure to temperatures below 5°C/41°F and/or condensation/water exposure.

Avoid outdoor application in seasons with low night temperatures, frost and frost in combination with condensation or rain.

Shelf life/storage: Store at temperatures between 5°C-40°C/41°F-104°F. Shelf life is reduced at temperatures above

30°C/86°F. Do not expose to frost during storage and transport, or before the coating is dry.

Cleaning of tools: Tools must be cleaned immediately with lukewarm soap water and/or fresh water followed by thoroughly

rinsing to remove residues of detergent.

**Safety:** Handle with care. Before and during use, observe all safety labels on packaging and paint containers,

consult Hempel Material Safety Data Sheets and follow all local or national safety regulations. Avoid inhalation, avoid contact with skin and eyes, and do not swallow. Take precautions against possible risks

of fire or explosions as well as protection of the environment. Apply only in well ventilated areas.

Issued by: HEMPEL A/S

These Application Instructions supersede those previously issued.

For explanations, definitions and scope see "Explanatory Notes" available on www.hempel.com. Data, specifications, directions and recommendations given in this data sheet represent only test results or experience obtained under controlled or specially defined circumstances. Their accuracy, completeness or appropriateness under the actual conditions of any intended use of the Products herein must be determined exclusively by the Buyer and/or User. The Products are supplied and all technical assistance is given subject to Hempel's general conditions of sales, delivery and service, unless otherwise expressly agreed in writing. The Manufacturer and Seller disclaim, and Buyer and/or User waive all claims involving, any liability, including but not limited to negligence, except as expressed in said general conditions for all results, injury or direct or consequential losses or damages arising from the use of the Products as recommended above, on the overleaf or otherwise. Product data are subject to change without notice and become void five years from the date of issue.

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